

Work Order ID 111992-1

January-28-14 10:04:02 AM

\*111992\*

Page 1

Item ID: D4653-041

Revision ID:

Item Name: Vent Manifold Assembly

Start Date: 28/01/2014 Start Qty: 16.00

Required Date: 28/01/2014 Req'd Qty: 16.00

Reference:

Accept

\*N900040100\*

Setup Start \*NS1\*

Stop \*NS2\*

D 4653-041

\*16\* 0111992

Cust Item ID:

\*16\*

Customer:

Approvals:

Process Plan:

Date: 14-01-28

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

Draw Nbr

Revision Nbr

D4653

REV A

110

Pick Kit

0.00

\*110\*

Packaging

Memo

0.00

Packaging

170

0.00

\*170\*

Small Fab

Memo

0.00

Small Fab

INSTALL FITTING ASSEMBLY WITH LUBE AS PER DWG

BATCH #: M110348

180

QC5- Inspect part completeness to step on W/O

0.00

\*180\*

QC

Memo

0.00

Quality Control

DAS

27

9:09

14/3/17

FF  
14-03-17FF  
14-03-17

DISP

Q1

# Work Order ID 111992

January-28-14 10:04:02 AM

**\*111992\***

Page 2

Item ID: D4653-041 Accept **\*N900040100\*** Setup Start **\*NS1\***  
 Revision ID: Stop **\*NS2\***  
 Item Name: Vent Manifold Assembly  
 Start Date: 28/01/2014 Start Qty: 16.00 **\*16\*** Cust Item ID:  
 Required Date: 28/01/2014 Req'd Qty: 16.00 **\*16\*** Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start **\*NR1\***  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
190	Identify as per dwg & Stock Location: _____	0.00							
<b>*190*</b>									
Packaging	Memo <i>SD118</i>	0.00							
Packaging									
200	QC21- Final Inspection - Work Order Release	0.00							
<b>*200*</b>									
QC	Memo	0.00							
Quality Control									

*14/3/12* *(7)* DAS 32 9-89

*MLJ 14-03-17*

*WU.0317*

# Picklist Print

January-28-14 10:04:01 AM

Page 1

Work Order ID: 111992

Parent Item: D4653-041

Parent Item Name: Vent Manifold Assembly

Start Date: 28/01/2014


Required Date: 28/01/2014

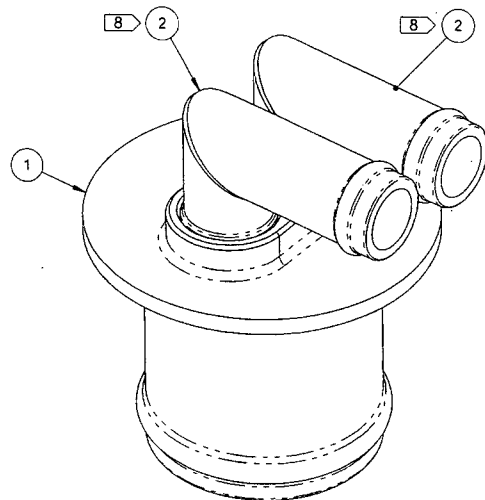
Start Qty: 16.00

Required Qty: 16.00

Comments: IPP REV:A 12.06.08 NEW ISSUE DD VERF:EC  
ASSY JLM VERIFIED BY:DD

IPP REV B 12-09-20 REVISED

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
 D4653-3 Collar		Manufactured	No		111990	110	Each	2.0000	1	16 7	FF	14-03-17	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				GA		2							
					111134	2							
D4653-045 Fitting Assembly		Manufactured	No			170	Each	1.0000	2	32	FF	14-03-17	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				GA	111900	1				14			
					110418	1							



**D4653-041 VENT MANIFOLD ASSEMBLY**

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4653-041	VENT MANIFOLD ASSEMBLY
1	1	D4653-3	COLLAR
2	2	D4653-045	FITTING ASSEMBLY
3	A/R	LUBRICANT	MOLKOTE 55 O-RING GREASE

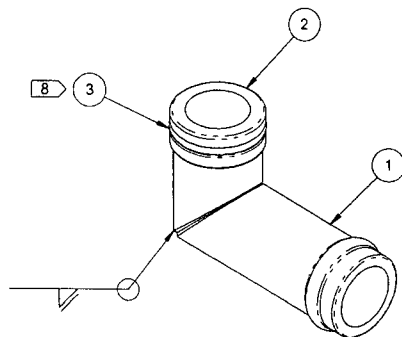
**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.1
- 7) WEIGHT: 0.35 lbs
- 8) APPLY A LAYER OF MOLYKOTE 55 O-RING GREASE TO O-RING PRIOR TO INSTALLING D4653-045

**RELEASED**  
2012-11-05  
*INV*

A	NEW ISSUE	MB	12.07.25
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	<b>DART AEROSPACE LTD</b>	
DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4653	SHEET 1 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	VENT MANIFOLD ASSY	NTS
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111992 MP  
14-01-28



**D4653-045 FITTING ASSEMBLY**

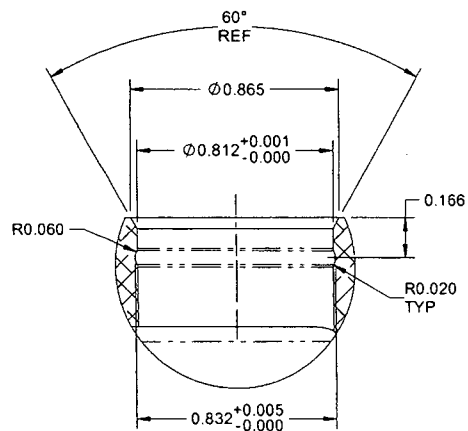
**NOTES:**

- 1) MATERIAL: N/A
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.06 lbs
- 8) WELD PER QSI 004
- 9) CHEMICAL CONVERSION COAT PRIOR TO INSTALLING O-RING

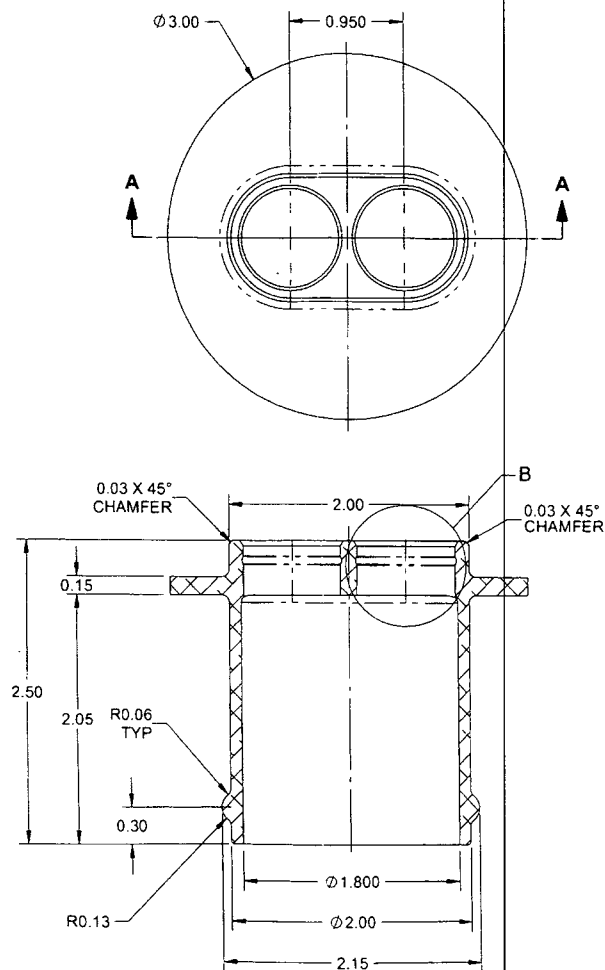
ITEM	QTY -045	P/N	DESCRIPTION
	X	D4653-045	FITTING ASSEMBLY
1	1	D4653-7	LARGE FITTING
2	1	D4653-9	SMALL FITTING
3	1	D4654-3	O-RING

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2012-11-05  
MP

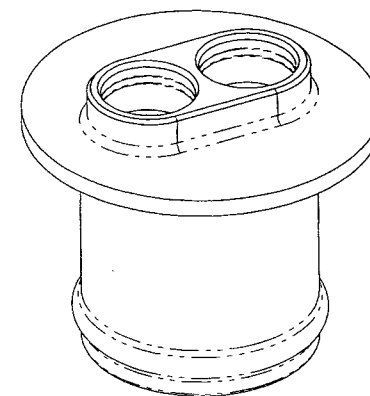
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DRAWN	<i>[Signature]</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4653	SHEET 2 OF 6
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**SECTION B-B**  
SCALE 2X, 2 PL



**SECTION A-A**



**D4653-3 COLLAR**

**NOTES:**

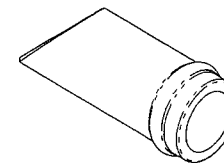
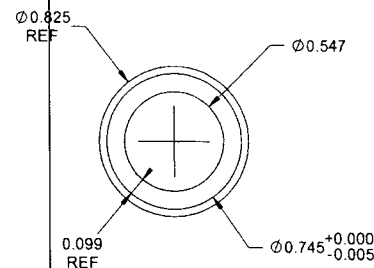
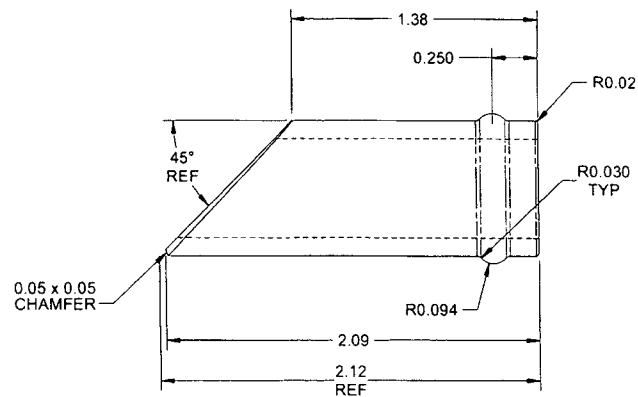
- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR  
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221  
REF DART SPEC M6061T6R
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.24 lbs

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2012-11-05  
WMD

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DRAWN	AB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	AB	DRAWING NO.	REV. A
MFG. APPR.	AB	D4653	SHEET 3 OF 6
APPROVED	AB	TITLE	SCALE
DE APPR.	AB	VENT MANIFOLD ASSY	NTS
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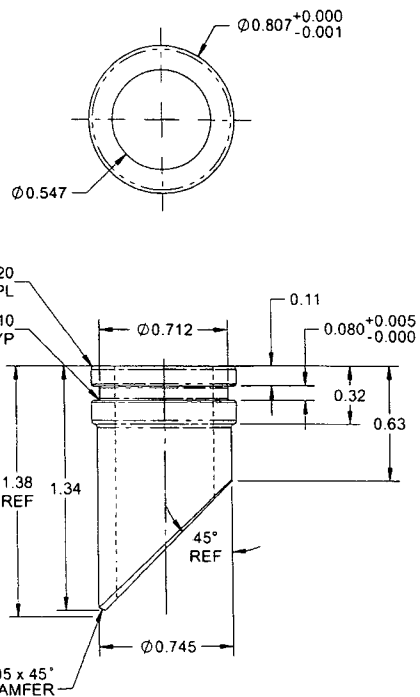
# **D4653-7 LARGE FITTING**

## **NOTES:**

- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR  
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221  
REF DART SPEC M6061T6R
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.04 lbs

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CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	<b>D4653</b>	SHEET 4 OF 6
APPROVED	<i>[Signature]</i>	TITLE	SCALE
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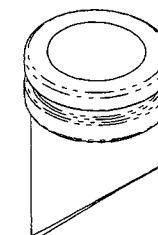
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*JMO*



**D4653-9 SMALL FITTING**

**NOTES:**

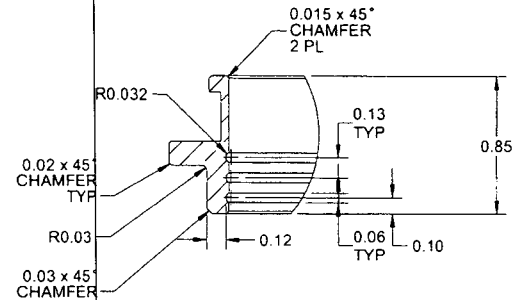
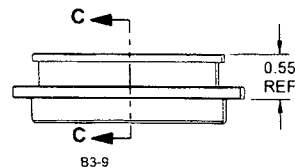
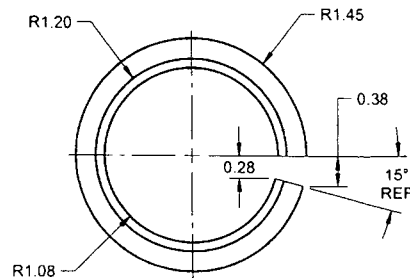
- 1) MATERIAL: 6061-T6/T651/T6510/T6511/T62 ALUMINUM ROUND BAR  
PER QQ-A-225/8 OR AMS-QQ-A-225/8 (OR AMS 4117/4128/4115/4116)  
OR QQ-A-200/8 OR AMS-QQ-A-200/8 (OR AMS 4160)  
OR ASTM B211 OR ASTM B221  
REF DART SPEC M6061T6R
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.02 lbs



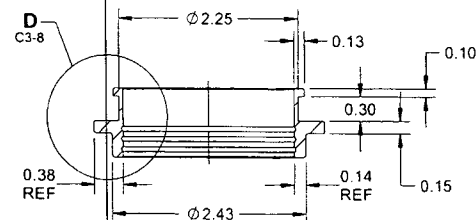
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DESIGN	77	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
DRAWN	77	DRAWING NO.	REV. A
CHECKED	77	D4653	SHEET 5 OF 6
MFG. APPR.	77	TITLE	SCALE
APPROVED	77	VENT MANIFOLD ASSY	NTS
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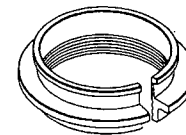


**DETAIL D** C4-9  
SCALE 2X



**SECTION C-C** C6-9

**D4653-11 CLAMP**



**NOTES:**

- 1) MATERIAL: DELRIN II 150E OR ACETRON GP ACETAL  
REF DART SPEC M-DELRIN-B
- 2) FINISH: N/A
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.7
- 7) WEIGHT: 0.032 lbs

DESIGN	<i>[Signature]</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA	
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CHECKED	<i>[Signature]</i>	D4653	SHEET 6 OF 6
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